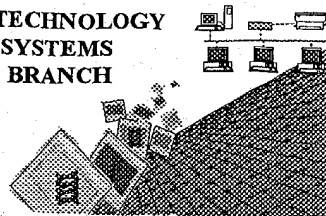


BIOTECHNOLOGY
SYSTEMS
BRANCH



0590
03/3

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/079,134
Source: O I P E
Date Processed by STIC: 3/5/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

01PE

ERROR DETECTED **SUGGESTED CORRECTION** SERIAL NUMBER: 10/079,134

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 ✓ Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ✓ Use of <220> Sequence(s) All missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



Does Not Comply
Corrected Diskette Needed

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002
TIME: 14:23:06

Input Set : A:\10014010.ST25.txt
Output Set: N:\CRF3\03052002\J079134.raw

→ The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

3 <110> APPLICANT: Nikiforov, Theo T.
5 <120> TITLE OF INVENTION: Methods and Systems for Identifying Nucleotides by Primer Extension
7 <130> FILE REFERENCE: 100/14010
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/079,134
C--> 9 <141> CURRENT FILING DATE: 2002-02-20
9 <150> PRIOR APPLICATION NUMBER: 60/270,667
10 <151> PRIOR FILING DATE: 2001-02-22
12 <160> NUMBER OF SEQ ID NOS: 12
14 <170> SOFTWARE: PatentIn version 3.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 22
18 <212> TYPE: DNA
19 <213> ORGANISM: Synthetic ^① invalid response, see error summary sheet items 10 + 11
21 <220> FEATURE:
22 <221> NAME/KEY: misc_feature ^② must also explain genetic source in 223
23 <223> OTHER INFORMATION: Fluorescein labeled thymidine residue
26 <220> FEATURE:
27 <221> NAME/KEY: misc_feature
28 <222> LOCATION: (22)..(22)
29 <223> OTHER INFORMATION: Fluorescein labeled thymidine residue
32 <400> SEQUENCE: 1
W--> 33 ctgccattat gttaggcatt an 22
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 22
38 <212> TYPE: DNA
39 <213> ORGANISM: Synthetic Same errors
41 <220> FEATURE:
42 <221> NAME/KEY: misc_feature
43 <222> LOCATION: (22)..(22)
44 <223> OTHER INFORMATION: Fluorescein labeled cytosine residue
47 <400> SEQUENCE: 2
W--> 48 ctgccattat gttaggcatt an 22
51 <210> SEQ ID NO: 3
52 <211> LENGTH: 22
53 <212> TYPE: DNA
54 <213> ORGANISM: Synthetic Same errors
56 <220> FEATURE:
57 <221> NAME/KEY: misc_feature
58 <222> LOCATION: (22)..(22)
59 <223> OTHER INFORMATION: fluorescein labeled thymidine residue
62 <400> SEQUENCE: 3
W--> 63 aggacttcca cgtggaccag gn 22
66 <210> SEQ ID NO: 4

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/10/079,134

TIME: 14:23:06

Input Set : A:\10014010.ST25.txt

Output Set: N:\CRF3\03052002\J079134.raw

67 <211> LENGTH: 23
68 <212> TYPE: DNA
69 <213> ORGANISM: Synthetic *Some errors*
71 <220> FEATURE:
72 <221> NAME/KEY: misc_feature
73 <222> LOCATION: (22)..(22)
74 <223> OTHER INFORMATION: fluorescein labeled thymidine residue
77 <220> FEATURE:
78 <221> NAME/KEY: misc_feature
79 <222> LOCATION: (23)..(23)
80 <223> OTHER INFORMATION: fluorescein labeled cytosine residue
83 <400> SEQUENCE: 4

W--> 84 aggacttcca cgtggaccag gnn 23
87 <210> SEQ ID NO: 5
88 <211> LENGTH: 30
89 <212> TYPE: DNA
90 <213> ORGANISM: Synthetic *Some errors*
92 <400> SEQUENCE: 5
93 ttggcatgt aatgcctaac ataatggcag 30
96 <210> SEQ ID NO: 6
97 <211> LENGTH: 30
98 <212> TYPE: DNA
99 <213> ORGANISM: Synthetic *Some errors*
101 <400> SEQUENCE: 6
102 ttggcatat aatgcctaac ataatggcag 30
105 <210> SEQ ID NO: 7
106 <211> LENGTH: 31
107 <212> TYPE: DNA
108 <213> ORGANISM: Synthetic *Some errors*
110 <400> SEQUENCE: 7
111 acggtggtcg cctggtccac gtggaagtcc t 31
114 <210> SEQ ID NO: 8
115 <211> LENGTH: 31
116 <212> TYPE: DNA
117 <213> ORGANISM: Synthetic *Some errors*
119 <400> SEQUENCE: 8
120 acggtggtca cctggtccac gtggaagtcc t 31
123 <210> SEQ ID NO: 9
124 <211> LENGTH: 87
125 <212> TYPE: DNA
126 <213> ORGANISM: Synthetic *Some errors*
128 <400> SEQUENCE: 9
129 cgcaccacta gtgccaatgg caccaaaaca ccccttggca tgtaatgcct aacataatgg 60
131 cagggagtgtg caaagagtaa gcaacta 87
134 <210> SEQ ID NO: 10
135 <211> LENGTH: 87
136 <212> TYPE: DNA
137 <213> ORGANISM: Synthetic *Some errors*
139 <400> SEQUENCE: 10

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002

TIME: 14:23:06

Input Set : A:\10014010.ST25.txt

Output Set: N:\CRF3\03052002\J079134.raw

140 cgcaccacta gtgccaatgg caccaaaaca ccctttggca tataatgcct aacataatgg 60
142 cagggagtgtg caaagagtaa gcactta 87
145 <210> SEQ ID NO: 11
146 <211> LENGTH: 21
147 <212> TYPE: DNA
148 <213> ORGANISM: Synthetic *Some errors*
150 <400> SEQUENCE: 11
151 taagtgcctta ctctttgcaa c 21
154 <210> SEQ ID NO: 12
155 <211> LENGTH: 21
156 <212> TYPE: DNA
157 <213> ORGANISM: Synthetic *Some errors*
159 <400> SEQUENCE: 12
160 cgcaccacta gtgccaatgg c 21

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002

TIME: 14:23:07

Input Set : A:\10014010.ST25.txt

Output Set: N:\CRF3\03052002\J079134.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1

L:48 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2

L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3

L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4